AMENDMENTS TO THE CLAIMS

1. (PREVIOUSLY PRESENTED) An assembly comprising:

a database circuit configured to store a plurality of pointer values for a plurality of first parameters defined by a network protocol, wherein each one of said first parameters is associated with a corresponding one of said pointer values; and

a processing circuit configured to (i) process a particular one of said first parameters in an incoming packet received by said assembly in accordance with said corresponding pointer value to produce a second parameter and (ii) present an outgoing packet from said assembly containing said second parameter.

2. (PREVIOUSLY PRESENTED) The assembly according to claim 1, wherein (i) said database circuit is further configured to store a plurality of offset values and a plurality of length values for said first parameters, each one of said first parameters is further associated with both a corresponding one of said offset values and a corresponding one of said length values and (ii) said processing circuit is further configured to partition said incoming packet in accordance with at least one of said offset values and at least one of said length values to extract said particular first parameter.

3. (PREVIOUSLY PRESENTED) The assembly according to claim 2, further comprising an interface through which said offset values, said length values and said pointer values are downloaded for storage in said database circuit.

4. (PREVIOUSLY PRESENTED) The assembly according to claim 1, wherein said processing circuit comprises:

a parsing circuit configured to partition said incoming packet;

a plurality of peripheral blocks (i) coupled to said parsing circuit, (ii) identified by said pointer values and (iii) configured to perform a plurality of processes involving said first parameters; and

an assembling circuit coupled to said peripheral blocks and configured to generate said outgoing packet.

5. (PREVIOUSLY PRESENTED) The assembly according to claim 4, wherein said database circuit is further configured to store both a second offset value and a second length value for said second parameter as defined by a second network protocol.

6. (CURRENTLY AMENDED) The assembly according to claim 4, further comprising an interface connectable to ~~a peripheral~~

~~block~~ at least one of said peripheral blocks located external to said assembly.

7. (CURRENTLY AMENDED) The assembly according to claim 4, wherein said peripheral blocks are at least two circuits selected from a group of circuits ~~consisting of~~ including a content addressable memory circuit, a time to live circuit, a comparison circuit, a counter circuit, a value swapping circuit, a stuffing circuit, a de-stuffing circuit, a cyclic redundancy checksum circuit, a parity circuit, a first-in-first-out circuit, a length construction generator circuit, a header error control synchronization circuit, a frame relay lookup circuit, a data link connection identifier circuit, a protocol identification analysis circuit, a point-to-point protocol verification circuit, a parameter discard circuit, and a buffer circuit.

8. (PREVIOUSLY PRESENTED) The assembly according to claim 4, wherein said peripheral blocks are configured to simultaneously processes a plurality of said first parameters.

9. (PREVIOUSLY PRESENTED) The assembly according to claim 1, wherein said processing circuit is implemented as only hardware.

10. (PREVIOUSLY PRESENTED) An assembly comprising:

a first circuit configured to delineate a receive frame received from a first network having a first network protocol to produce an incoming packet;

a second circuit configured to (i) store a plurality of pointer values for a plurality of first parameters defined by said first network protocol, wherein each one of said first parameters is associated with a corresponding one of said pointer values, (ii) process a particular one of said first parameters in said incoming packet in accordance with said corresponding pointer value to produce a second parameter, and (iii) present an outgoing packet containing said second parameter; and

a third circuit configured to frame said outgoing packet to present a transmit frame to a second network.

11. (PREVIOUSLY PRESENTED) The assembly according to claim 10, wherein said second circuit is further configured to (i) store a plurality of offset values and a plurality of length values for said first parameters, each one of said first parameters is further associated with both a corresponding one of said offset values and a corresponding one of said length values and (ii) partition said incoming packet in accordance with said offset values and said length values to extract said first parameters from said incoming packet.

12. (ORIGINAL) The assembly according to claim 10, wherein said first circuit is further configured to provided a plurality of frame delineation methods for a plurality of network protocols.

13. (ORIGINAL) The assembly according to claim 12, further comprising an interface configured to permit a selection among said frame delineation methods.

14. (PREVIOUSLY PRESENTED) The assembly according to claim 10, wherein said third circuit is further configured to provided a plurality of framing methods for a plurality of network protocols.

15. (ORIGINAL) The assembly according to claim 14, further comprising an interface configured to permit a selection among said framing methods.

16. (PREVIOUSLY PRESENTED) The assembly according to claim 10, wherein said third circuit is further configured to delineate a second receive frame from said second network to produce a second incoming packet.

17. (PREVIOUSLY PRESENTED) The assembly according to claim 16, wherein said first circuit is further configured to frame a second outgoing packet derived from said second incoming packet to present a second transmit frame to said first network.

18. (PREVIOUSLY PRESENTED) The assembly according to claim 10, wherein said first circuit comprises a plurality of framing circuits configured to operate on a plurality of network protocols, wherein each one of said framing circuits operates on a corresponding one of said network protocols.

19. (PREVIOUSLY PRESENTED) The assembly according to claim 10, wherein said third circuit comprises a plurality of de-framing circuits configured to operate on a plurality of network protocols, wherein each one of said de-framing circuits operates on a corresponding one of said network protocols.

20. (PREVIOUSLY PRESENTED) The assembly according to claim 10, further comprising a fourth circuit connected to said second circuit and configured to process a select one of said first parameters in said incoming packet in accordance with said corresponding pointer value.